

REMARKS

Claims 1-20 are currently pending in the application. No claims have been amended herein. Accordingly, following the entry of this paper, claims 1-20 will be pending in the application.

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Claims 1, 3-9, 11-15, 17 and 19 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,091,835 to Smithies et al.(hereinafter referred to as "Smithies"). Applicants respectfully traverse the rejection.

With respect to independent claim 1, the claim is directed to a method for electronically signing an electronic transcript, comprising: (a) performing a first hash operation on the electronic transcript to generate a representation of the contents of the electronic transcript; (b) concatenating data to the representation of the contents of the electronic transcript, said data identifying a user; (c) performing a second hash operation on the data concatenated to the representation, the second hash operation generating a representation of the contents of the electronic transcript and the data; (d) providing for the recording and time stamping by a digital notary service of the representation of the contents of the electronic transcript and the data; (e) obtaining a notary record from the digital notary service of the time stamping; (f) digitally signing the notary record; and (g) forming an electronically signed electronic transcript by bundling the digitally signed notary record with the electronic transcript and with the data identifying the user.

Applicants submit that the Examiner has not established *prima facie* obviousness based on the Smithies reference. As described in MPEP § 2142, in order to establish a *prima facie* case of obviousness, the Examiner must provide (i) some suggestion or motivation to modify the reference, (ii) a reasonable expectation of success, and (iii) the prior art reference must teach or suggest all of the claim limitations. Smithies does not teach or suggest all of the claim limitations of claim 1. In particular, Smithies does not teach or suggest "concatenating data to the representation of the contents of the electronic transcript, said data identifying a user," and

“performing a second hash operation on the data concatenated to the representation, the second hash operation generating a representation of the contents of the electronic transcript and the data.” As defined by the claim, the “representation of the contents of the electronic transcript” is the result of step (a) in the claim, namely the performing of a first hash on an electronic transcript.

Smithies is directed to authentication of electronic signatures in computer-based recording or transcribing systems. Particularly, Smithies is directed to a “ceremony” of affirmation that verifies the identity of a user and verifies that the user actually understands that their electronic signature is a binding affirmation of the recitations of the ceremony and the document being signed, similar to the understanding a person has when physically signing a piece of paper. As described at column 14, lines 5-21, the integrity of the provisions or undertakings of a document, transaction or statement may be verified using a one-way hash operation. As described in Smithies, a transcript generator module creates a one-way hash corresponding to the contents of the document, transaction or statement. This hash encoding may be compared to a hash encoding of a later copy of the document, transaction or statement to verify that the document, transaction or statement has not been modified since the time of affirmation. Smithies thus teaches performing a hash operation at the time of the affirmation, the result of which is then compared with results of a hash operation performed at a later time. In this manner, it may be verified that the contents of the document, transaction or statement have not been modified since the time of the affirmation.

Importantly, Smithies teaches only a hash operation on a document, and has no teaching or suggestion of a second hash operation on data concatenated to a representation as required by the claim. The second hash operation that the Examiner refers to is a hash of only the document that is performed at a later time in order to verify the contents of the document have not been altered. Thus, two separate hash operations are performed on the same document, one to generate the initial hash, and the other to generate a separate hash that is to be compared to the initial hash and verify the document is not changed from the time of the initial hash. This second hash of the document as disclosed in Smithies does not provide any teaching or suggestion of a hash operation performed on anything except the document itself.

Furthermore, because Smithies contains no teaching, suggestion, or motivation for concatenating data to a representation and performing a second hash operation on the data concatenated to the representation, Smithies also contains no teaching of “providing for the recording and time stamping by a digital notary service of the representation of the contents of the electronic transcript and the data; obtaining a notary record from the digital notary service of the time stamping; digitally signing the notary record; and forming an electronically signed electronic transcript by bundling the digitally signed notary record with the electronic transcript and with the data identifying the user.” Accordingly, Applicants submit that Claim 1 is patentably distinct over Smithies and is in condition for allowance. Furthermore, claims 3-6 depend (directly or indirectly) from claim 1. It is submitted that each of these dependent claims is also allowable for at least the same reasons as claim 1.

Independent claim 7 is directed to a computer program product comprising: a computer useable medium and computer readable code embodied on said computer useable medium for causing electronically signing an electronic transcript by a user, the computer readable code comprising: (a) computer readable program code devices configured to cause the computer to effect the performing a first hash operation on the electronic transcript to generate a representation of the contents of the electronic transcript; (b) computer readable program code devices configured to cause the computer to effect the concatenating data to the representation of the contents of the electronic transcript, said data identifying the user; (c) computer readable program code devices configured to cause the computer to effect the performing a second hash operation on the data concatenated to the representation, the second hash operation generating a representation of the contents of the electronic transcript and the data; (d) computer readable program code devices configured to cause the computer to effect the providing for the recording and time stamping by a digital notary service of the representation of the contents of the electronic transcript and the data; (e) computer readable program code devices configured to cause the computer to effect the obtaining a notary record from the digital notary service of the time stamping; (f) computer readable program code devices configured to cause the computer to effect the digitally signing the notary record; and (g) computer readable program code devices configured to cause the computer to effect the forming of an electronically signed transcript by

bundling the digitally signed notary record with the electronic transcript and the data identifying the user.

Smithies does not provide any teaching, suggestion, or motivation of the computer program product as claimed in claim 7. As discussed above, Smithies is directed to authentication of electronic signatures in computer-based recording or transcribing systems, and teaches performing a hash operation on a document at the time of the affirmation, which is then compared with a hash operation performed on the same document at a later time when it is desired to verify that the contents of the document have not been modified since the time of the affirmation.

Smithies contains no teaching of “computer readable program code devices configured to cause the computer to effect the performing a first hash operation on the electronic transcript to generate a representation of the contents of the electronic transcript; computer readable program code devices configured to cause the computer to effect the concatenating data to the representation of the contents of the electronic transcript, said data identifying the user;” and “computer readable program code devices configured to cause the computer to effect the performing a second hash operation on the data concatenated to the representation, the second hash operation generating a representation of the contents of the electronic transcript and the data,” as required by claim 7. Similarly as described above, the hash described by Smithies, at column 14 lines 11-13, and at column 14, line 33 is a hash corresponding to the contents of the document that may then be authenticated at a later time by comparing a second hash corresponding to the contents of the document generated at the time of authentication to the hash generated at the time of affirmation. Smithies contains no teaching of computer readable program code devices configured to cause the computer to effect the performing a second hash operation on the data concatenated to the representation, the second hash operation generating a representation of the contents of the electronic transcript and the data, as required by claim 7.

Furthermore, because Smithies contains no teaching of such a second hash operation on the contents of the transcript and the concatenated data, Smithies also contains no teaching of “computer readable program code devices configured to cause the computer to effect the providing for the recording and time stamping by a digital notary service of the representation of the contents of the electronic transcript and the data; computer readable program code devices

configured to cause the computer to effect the obtaining a notary record from the digital notary service of the time stamping; computer readable program code devices configured to cause the computer to effect the digitally signing the notary record; and computer readable program code devices configured to cause the computer to effect the forming of an electronically signed transcript by bundling the digitally signed notary record with the electronic transcript and the data identifying the user” as required by the claim. Accordingly, Applicants submit that Claim 7 is not anticipated by Smithies and is therefore in condition for allowance.

Independent claim 8 is directed to a computer data signal embodied in a transmission medium, comprising: (a) a code segment including instructions for performing a first hash operation on an electronic transcript to generate a representation of the contents of the electronic transcript; (b) a code segment including instructions for concatenating data to the representation of the contents of the electronic transcript, said data identifying the user; (c) a code segment including instructions for performing a second hash operation on the data concatenated to the representation, the second hash operation generating a representation of the contents of the electronic transcript and the data; (d) a code segment including instructions for providing for the recording and time stamping by a digital notary service of the representation of the contents of the electronic transcript and the data; (e) a code segment including instructions for obtaining a notary record from the digital notary service of the time stamping; (f) a code segment including instructions for digitally signing the notary record; and (g) a code segment including instructions for forming an electronically signed electronic transcript including the digitally signed notary record, the electronic transcript, and the data identifying the user.

Smithies contains no teaching, suggestion, or motivation of the computer program product as claimed in claim 8. As discussed above, Smithies is directed to authentication of electronic signatures in computer-based recording or transcribing systems, with authentication accomplished by performing a hash operation at the time of the affirmation which is compared with a hash operation performed at a later time (on the same data) when it is desired to verify that the contents of the document have not been modified since the time of the affirmation.

Smithies contains no teaching of “a code segment including instructions for performing a first hash operation on an electronic transcript to generate a representation of the contents of the electronic transcript; a code segment including instructions for concatenating data to the

representation of the contents of the electronic transcript, said data identifying the user” and “a code segment including instructions for performing a second hash operation on the data concatenated to the representation, the second hash operation generating a representation of the contents of the electronic transcript and the data,” as required by claim 8. Similarly as described above, the hash described by Smithies is one-way hash corresponding to the contents of the document that may then be verified at the time of authentication. Smithies thus contains no teaching of a second hash operation, or concatenating data as required by the claim.

Furthermore, because Smithies contains no teaching of concatenating data or a second hash operation, Smithies also contains no teaching of “a code segment including instructions for providing for the recording and time stamping by a digital notary service of the representation of the contents of the electronic transcript and the data; a code segment including instructions for obtaining a notary record from the digital notary service of the time stamping; a code segment including instructions for digitally signing the notary record; and a code segment including instructions for forming an electronically signed electronic transcript including the digitally signed notary record, the electronic transcript, and the data identifying the user” as required by the claim. Accordingly, Applicants submit that Claim 8 is therefore in condition for allowance.

Independent claim 9 is directed to a method for electronically signing an electronic transcript, comprising: (a) performing a first hash operation on a file containing the electronic transcript to generate a representation of the contents of the electronic transcript; (b) concatenating data to the representation of the contents of the electronic transcript, said data identifying a user; (c) performing a second hash operation on the data and the representation, the second hash operation generating a representation of the contents of the electronic transcript and the data; (d) providing for the recording and time stamping by a digital notary service of the representation of the contents of the electronic transcript and the data; (e) obtaining a notary record from the digital notary service of the time stamping; (f) digitally signing the notary record; and (g) forming an electronically signed electronic transcript by bundling the digitally signed notary record with the data identifying the user and with the file containing the electronic transcript.

Smithies does not contain any teaching, suggestion, or motivation of the method as claimed in claim 9. As discussed above, Smithies is directed to authentication of electronic

signatures in computer-based recording or transcribing systems. A transcript generator module may create a one-way hash corresponding to the contents of the document, transaction or statement that may be compared to a hash encoding of any later copy of the same document to verify that the document has not been modified since the time of affirmation. Smithies thus teaches performing a hash operation at the time of the affirmation, which is then compared with a hash operation performed at a later time when it is desired to verify that the contents of the document have not been modified.

Smithies contains no teaching of “performing a first hash operation on a file containing the electronic transcript to generate a representation of the contents of the electronic transcript; concatenating data to the representation of the contents of the electronic transcript, said data identifying a user, and “performing a second hash operation on the data and the representation, the second hash operation generating a representation of the contents of the electronic transcript and the data,” as required by claim 9. Similarly as described above, the hash described by Smithies is one-way hash corresponding to the contents of the document that may then be verified at the time of authentication. Smithies thus contains no teaching of a second hash operation, or concatenating data as required by the claim.

Furthermore, because Smithies contains no teaching of concatenating data or a second hash operation, Smithies also contains no teaching of “providing for the recording and time stamping by a digital notary service of the representation of the contents of the electronic transcript and the data; obtaining a notary record from the digital notary service of the time stamping; digitally signing the notary record; and forming an electronically signed electronic transcript by bundling the digitally signed notary record with the data identifying the user and with the file containing the electronic transcript” Accordingly, Applicants submit that Claim 9 is therefore in condition for allowance. Furthermore, claims 11-15 depend (directly or indirectly) from claim 9. It is submitted that each of these dependent claims is also allowable for at least the same reasons as claim 9.

Independent claim 17 is directed to a computer program product comprising: a computer useable medium and computer readable code embodied on said computer useable medium for causing electronically signing an electronic transcript by a user, the computer readable code comprising: (a) computer readable program code devices configured to cause the computer to

effect the performing a first hash operation on a file containing the electronic transcript to generate a representation of the contents of the electronic transcript; (b) computer readable program code devices configured to cause the computer to effect the concatenating data to the representation of the contents of the electronic transcript, said data identifying the user; (c) computer readable program code devices configured to cause the computer to effect the performing a second hash operation on the data concatenated to the representation, the second hash operation generating a representation of the contents of the electronic transcript and the data; (d) computer readable program code devices configured to cause the computer to effect the providing for the recording and time stamping by a digital notary service of the representation of the contents of the electronic transcript and the data; (e) computer readable program code devices configured to cause the computer to effect the obtaining a notary record from the digital notary service of the time stamping; (f) computer readable program code devices configured to cause the computer to effect the digitally signing the notary record; and (g) computer readable program code devices configured to cause the computer to effect the forming of an electronically signed transcript by bundling the digitally signed notary record with the data identifying the user and with the file containing the electronic transcript.

Smithies does not provide any teaching, suggestion, or motivation of the computer program product as claimed in claim 17. As discussed above, Smithies is directed to authentication of electronic signatures in computer-based recording or transcribing systems. A transcript generator module may create a one-way hash corresponding to the contents of the document, transaction or statement that may be compared to a hash encoding of any later copy of the document to verify that the document has not been modified since the time of affirmation. Smithies thus teaches performing a hash operation at the time of the affirmation, which is then compared with a hash operation performed when it is desired to verify that the contents of the document have not been modified.

Smithies contains no teaching of "computer readable program code devices configured to cause the computer to effect the performing a first hash operation on a file containing the electronic transcript to generate a representation of the contents of the electronic transcript; computer readable program code devices configured to cause the computer to effect the concatenating data to the representation of the contents of the electronic transcript, said data



identifying the user,” and “computer readable program code devices configured to cause the computer to effect the performing a second hash operation on the data concatenated to the representation, the second hash operation generating a representation of the contents of the electronic transcript and the data,” as required by claim 17. Similarly as described above, the hash described by Smithies is one-way hash corresponding to the contents of the document that may then be verified at the time of authentication. Smithies contains no teaching of a second hash operation, or concatenating data as required by the claim.

Furthermore, because Smithies contains no teaching, suggestion, or motivation of concatenating data or a second hash operation, Smithies also contains no teaching, suggestion, or motivation of “computer readable program code devices configured to cause the computer to effect the providing for the recording and time stamping by a digital notary service of the representation of the contents of the electronic transcript and the data; computer readable program code devices configured to cause the computer to effect the obtaining a notary record from the digital notary service of the time stamping; computer readable program code devices configured to cause the computer to effect the digitally signing the notary record; and computer readable program code devices configured to cause the computer to effect the forming of an electronically signed transcript by bundling the digitally signed notary record with the data identifying the user and with the file containing the electronic transcript” as required by the claim. Accordingly, Applicants submit that Claim 17 is therefore in condition for allowance.

Independent claim 19 is directed to computer data signal embodied in a transmission medium, comprising: (a) a code segment including instructions for performing a first hash operation on a file containing an electronic transcript to generate a representation of the contents of the electronic transcript; (b) a code segment including instructions for concatenating data to the representation of the contents of the electronic transcript, said data identifying the user; (c) a code segment including instructions for performing a second hash operation on the data concatenated to the representation, the second hash operation generating a representation of the contents of the electronic transcript and the data; (d) a code segment including instructions for providing for the recording and time stamping by a digital notary service of the representation of the contents of the electronic transcript and the data; (e) a code segment including instructions for obtaining a notary record from the digital notary service of the time stamping; (f) a code

segment including instructions for digitally signing the notary record; and (g) a code segment including instructions for forming an electronically signed electronic transcript including the digitally signed notary record, file containing the electronic transcript, and the data identifying the user.

Smithies contains no teaching, suggestion, or motivation of the computer program product as claimed in claim 19. As discussed above, Smithies is directed to authentication of electronic signatures in computer-based recording or transcribing systems. A transcript generator module may create a one-way hash corresponding to the contents of the document, transaction or statement that may be compared to a hash encoding of any later copy of the document to verify that the document has not been modified since the time of affirmation. Smithies thus teaches performing a hash operation at the time of the affirmation, which is then compared with a hash operation performed when it is desired to verify that the contents of the document have not been modified.

Smithies contains no teaching, suggestion, or motivation of “a code segment including instructions for performing a first hash operation on a file containing an electronic transcript to generate a representation of the contents of the electronic transcript; a code segment including instructions for concatenating data to the representation of the contents of the electronic transcript, said data identifying the user; a code segment including instructions for performing a second hash operation on the data concatenated to the representation, the second hash operation generating a representation of the contents of the electronic transcript and the data,” as required by claim 19. Similarly as described above, the hash described by Smithies is one-way hash corresponding to the contents of the document that may then be verified at the time of authentication. Smithies contains no teaching of a second hash operation, or concatenating data as required by the claim.

Furthermore, because Smithies contains no teaching, suggestion, or motivation of concatenating data or a second hash operation, Smithies also contains no teaching, suggestion, or motivation of “a code segment including instructions for providing for the recording and time stamping by a digital notary service of the representation of the contents of the electronic transcript and the data; a code segment including instructions for obtaining a notary record from the digital notary service of the time stamping; a code segment including instructions for

digitally signing the notary record; and a code segment including instructions for forming an electronically signed electronic transcript including the digitally signed notary record, file containing the electronic transcript, and the data identifying the user," as required by the claim. Accordingly, Applicants submit that Claim 19 is therefore in condition for allowance.

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Claims 2, 10, 16, 18 and 20 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Smithies patent in view of U.S. Patent No. 6,336,188 to Blake-Wilson et al. (hereinafter referred to as "Blake-Wilson"). Applicants respectfully traverse the rejection.

Claim 2 depends from independent claim 1. Claims 10 and 16 depend from independent claim 9. Claim 18 depends from independent claim 17. Claim 20 depends from independent claim 19. Each of the independent claims has been previously discussed, and because Blake-Wilson does not cure the defects of Smithies, Applicants submit that dependent claims 2, 10, 16, 18, and 20 are each allowable for at least the same reasons as described with respect to the respective independent claims.

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No claim related fees are believed to be due with this response. In the event any such fees are due, please debit Deposit Account 08-2623.

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The application now appearing to be in form for allowance, reconsideration and allowance thereof is respectfully requested.

Respectfully submitted,

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